

V12-120.4/V12-240.1

Supply Modules for SMT Systems for Operation with an On-Board Electrical System or Battery Supply

Based on a nominal 12V input voltage, the modules provide a power for SMT systems with a maximum power consumption of 120W (V12-120.4) or 240W (V12-240.1).



Input Voltage

The supply voltage ranges of the modules were designed to tolerate the fluctuations in voltage typically experienced in vehicles. If the primary supply breaks down entirely, the system automatically switches to a connected backup supply thus ensuring uninterrupted operation.

Security

The monitoring of input voltages, load currents and module temperature means the components have extensive self-protection functions. A sophisticated power on/off mechanism as well as the power outputs, which are galvanically isolated from each other and from the input voltages, provide extra protection against operating errors.

Additional Functions

A freely usable supply output makes it possible to power additional external components, such as vehicle displays or separate measurement and data acquisition systems. A large number of Wakeup sources (voltage inputs, CAN nodes and timer functions) and a signal output are available to ensure intelligent supply module control.

SMT - More Than Measuring

The Softing Measurement Technology combines sophisticated measurement technology with signal generation, communication, computing power and memory depth. The unique module concept enables optimal adaptation to the individual application. Apart from standard measurements, SMT is also used in control and regulation, process monitoring and automation, real-time simulation and data logging.

softing

PEA

SMT

μ-Serie

AREAS OF APPLICATION

- Power supply for use in vehicles
- Power supply for battery-operated measurement tests
- Power supply for additional components

ADVANTAGES

- Optimal voltage range for use in vehicles
- Reliable measuring due to uninterrupted power supply
- High level of automation due to intelligent supply module control (Wakeup and Shutdown functions)

Data Sheet

Technical Data

Power Input	
Supply voltage	9 ... 18 V
	6 ... 9 V (short-term, < 3 s)
Standby current consumption	≤ 1 mA (with 12 V input voltage, Sleep Mode)
	≤ 120 mA (with 12 V input voltage, CAN active)
Power consumption in operation	Typ. 6 W base load plus system supply plus Power Output
Galvanic isolation	No
Backup Battery	
Supply voltage	11 ... 18 V
Quiescent current consumption	See Power Input
Power consumption in operation	See Power Input
Galvanic isolation	No
System supply	
Output voltage	48 V (DC)
Power output	Max. 120 W (V12-120.4)
	Max. 240 W (V12-240.1)
Efficiency	Typ. 85 % (V12-120.4)
	Typ. 83 % (V12-240.1)
Galvanic isolation	Yes
Power Output	
Output voltage	12 V (DC)
Power output	Max. 20 W (with Power Input ≥ 9 V)
Efficiency	Typ. 89 %
Galvanic isolation	Yes
Environmental conditions	
Storage	-30 °C ... +85 °C, 10 % ... 90 % rel. humidity, non-condensing
Use	-30 °C ... +70 °C, 10 % ... 90 % rel. humidity, non-condensing

Order Numbers

V12-120.4	Supply Module for SMT Systems for Operation with an On-Board Electrical System or Battery Supply (120 W)
V12-240.1	Supply Module for SMT Systems for Operation with an On-Board Electrical System or Battery Supply (240 W)